

**Claims:**

1. A cleaning method for a vapor phase deposition apparatus for forming film onto a substrate by introducing film forming gas into a chamber via a shower head, comprising:
  - a step of activating a cleaning gas including a compound containing fluorine atoms by exposure to microwaves, and introducing the radicals of said cleaning gas into said chamber; and
  - a step for raising the temperature of said shower head to a temperature greater than that used when forming film on said substrate.
2. A cleaning method for a vapor phase deposition apparatus according to claim 1, wherein the supply of a cooling medium to said chamber for cooling said shower head is restricted.
3. A cleaning method for a vapor phase deposition apparatus according to claim 2, wherein heat is applied to said shower head by a heater.
4. A cleaning method for a vapor phase deposition apparatus according to claim 1, wherein heat is applied to said shower head by a heater.
5. A cleaning method for a vapor phase deposition apparatus according to claim 1, wherein the temperature of said shower head is raised to 50°C or above.
6. A cleaning method for a vapor phase deposition apparatus according to claim 1, wherein said film forming gas includes gas consisting of a compound containing tungsten atoms, and the temperature of said shower head is raised to 70°C or above.
7. A vapor phase deposition apparatus comprising:
  - a chamber comprising a shower head and a circulation passage for passing a cooling medium for cooling said shower head;
  - a feed passage connected to one end of said circulation passage and leading to said circulation passage, along which said cooling medium travels;
  - a return passage connected to the other end of said circulation passage and exiting from said circulation passage, along which said cooling medium travels;
  - a bypass passage connecting said feed passage and said return passage; and

a control valve for controlling the flow of said cooling medium travelling in said bypass passage.

8. A vapor phase deposition apparatus according to claim 7, further comprising a heater for changing the temperature of said shower head.

9. A vapor phase deposition apparatus according to claim 7, further comprising cleaning gas introducing means for activating a cleaning gas by exposure to microwaves, and introducing the radicals of said cleaning gas into said chamber.

10. A vapor phase deposition apparatus according to claim 7, further comprising a gas supply source for supplying gas consisting of a compound containing tungsten atoms into said chamber.

11. A vapor phase deposition apparatus comprising:  
a chamber having a shower head for introducing film forming gas; and  
a heater for changing the temperature of said shower head.

12. A vapor phase deposition apparatus according to claim 11, further comprising cleaning gas introducing means for activating a cleaning gas by exposure to microwaves, and introducing the radicals of said cleaning gas into said chamber.

13. A vapor phase deposition apparatus according to claim 11, further comprising a gas supply source for supplying a gas consisting of a compound containing tungsten atoms into said chamber.